MULTIMEDIA UNIVERSITY®

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

BFM1014 – FUNDAMENTALS OF FINANCE

(All sections / Groups)

26 OCTOBER 2018
3.00 PM – 5.00 PM
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 6 pages with 4 Questions only.
2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

Answer ALL FOUR (4) questions. All questions carry equal marks and the distribution of the marks for each question is given.

QUESTION 1

A. You are planning to expand your Moon Cake Bakery and your friend is offering you to buy over his old factory. The market price of the factory is RM 250,000. You are planning to pay 20% as a down payment and the unpaid balance to be paid off over 30 years at a 12 percent rate of interest.

i. How much is the down payment that you are planning to pay? (2 marks)

ii. How much is the unpaid balance to be paid off? (3 marks)

iii. How much is the annual payment? (6 marks)

iv. Why you have to learn 'Time Value of Money"? Justify. (2 marks)

B. Steel Man Company wants to issue a 20 years bond for a new project expansion projects. The company plans to sell the bond RM 930 and make semiannual payment. The yield to maturity is 12%.

i. Is the bond issued at premium or discount? (2 marks)

ii. Calculate how much is the annual payment that the company has to pay if they issue the new bond. (8 marks)

iii. What coupon rate should the company set on its new bond if it wants them to sell at par? (2 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 2

A. What are the **THREE (3)** scenarios of dividends payment? If Toys Story Inc. just paid an annual dividend of RM 3.60 per share on its stock. The dividends are expected to grow at a constant rate of 4.5 percent per year, indefinitely. The required return is 11 percent on this stock, what will the price be in 12 years? (9 marks)

B. Smart City Bhd. has two project proposals which are Project Technology City and Project Digital City. The information on these projects are shown in the following table:

Year	Cash Flow (RM) Project Technology City	Cash Flow (RM) Project Digital City
1	65,000	50,000
2	65,000	60,000
3	65,000	70,000
4	65,000	80,000
5	65,000	90,000

The initial investment for each project is RM 195,000 and the cost of capital for both projects is 10%.

i. Compute the payback period for both projects. (4 marks)

ii. Explain the main weakness of using payback period technique to evaluate projects. (2 marks)

iii. Calculate the net present value for both projects. (4 marks)

iv. Calculate the profitability index for both projects. (4 marks)

v. Based on the analysis of above, if the company has to choose only one project, which project should the company invest? Why? (2 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 3

A. Fortnight Company just paid its annual regular cash dividend of RM 1.25 a share, along with a special dividend of RM 0.25 a share. The company follows a policy of increasing its dividend by 3 percent annually.

   i. How much is the total dividend per share that the company just paid? (2 marks)

   ii. What is special dividend? (2 marks)

   iii. What is the best estimation of the firm's next annual dividend payment? (3 marks)

B. Gardenia Bhd. has been listed in the Main Market of Bursa Malaysia since 2000. Recently, the company has been proposed with an offer of merger with a multi-national company headquartered in Australia. As part of the merger discussions between Gardenia Bhd., its shareholders and the multi-national companies, a number of vital information have been requested from Gardenia Bhd. management. Considering that you are the CFO of Gardenia Bhd., you have been instructed by the board of directors to analyse the company's capital structure using the following information.

Debt	45,750 units of 7.85% semi-annual coupon bonds outstanding with 20 years to maturity. The bonds are traded at 109 with the book value of RM 1,000 per unit.
Ordinary Shares Dividends	515,000 units outstanding with beta of 1.15. The shares are recorded in the company's book as RM 1/unit. The share closes at RM 83 today. RM 1.75 was paid in the last financial year with a projected growth of 4.32% annually.
Preferred Shares	12,650 units 5.25% shares outstanding, currently trading at RM 98. The book value of these shares is at RM 100/unit.
Market	Market risk premium is at 8.45% The investors require return at a rate of 7.08% on similar bond (YTM) The Malaysia Treasury bills stand at a rate of 6.45% The company is subjected to 25% corporate tax rate for the current year of assessment.

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Based on the information above, calculate:

i. Capital structure weights of Gardenia Bhd. (6 marks)

ii. Cost of equity of Gardenia Bhd. (2 marks)

iii. Cost of preferred shares of Gardenia Bhd. (2 marks)

iv. Cost of debt of Gardenia Bhd. (2 marks)

v. Gardenia Bhd.'s weighted average cost of capital. (4 marks)

vi. Based on your analyses, recommend the best course of action for Gardenia Bhd. in face of the merger offer. (2 marks)

[TOTAL 25 MARKS]

QUESTION 4

A. The net working capital is an accounting concept which represents the excess of current assets over current liabilities. Current assets consist of items such as cash, account receivables, inventory, etc. Current liabilities include items such as account payables, notes payables, accrued expenses, etc.

i. Why must a company maintain a good policy of working capital management? (4 marks)

ii. What are the **TWO (2)** types of inventory costs? (4 marks)

iii. If Second Hand Furniture Company sells 2,500 desks a year at an average price per desk of RM 1,250. The carrying cost per unit is RM 11.60. The company orders 80 desks at a time and has a fixed order cost of RM 55 per order. The desks are sold out before they are restocked. What is the economic order quantity? (5 marks)

Continued...

B. Wellness Incorporated has the information shown above on its annual Income Statement and Balance Sheet (all numbers shown are in millions).

Sales (credit sales)	RM 122,800
Cost of Goods Sold	104,380
Accounts Receivable	10,900
Inventory	1,420
Accounts Payable	5,500

i. What is Wellness's operating cycle? (7 marks)

ii. What is Wellness's cash conversion cycle? (5 marks)

[TOTAL 25 MARKS]

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APPENDIX

Future Value:

$FV = PV(1 + r)^t$

Annuities

$$PV = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV = PMT\left[\frac{(1+r)^t - 1}{r}\right]$$

Perpetuity: PV = PMT / r

EAR & APR

$$EAR = \left[1+\frac{APR}{m}\right]^m - 1$$

$$APR = m\left[(1+EAR)^{1/m} - 1\right]$$

Bond Pricing

$$\text{Bond Value} = C\left[\frac{1-\frac{1}{(1+YTM)^t}}{YTM}\right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty}\frac{D_t}{(1+R)^t}$$

Estimating Dividends

Zero growth: $P_0 = D / R$

Constant Growth Stock: $D_t = D_0(1+g)^t$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \ldots + \frac{D_\infty}{(1+R)^\infty}$$

Net Present Value

$$NPV = \sum_{t=0}^{n}\frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

WACC

$= E/V \times R_E + P/V \times R_P + D/V \times R_D(1 - T_C)$

Operating cycle

= inventory period + accounts receivable period

Cash Cycle

= Operating Cycle – Accounts payable period

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

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